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IMPORTANT NOTICE
TELECOPY/FACSIMILE COVER LETTER

TO: U.S. Patent and Trademark Office
Examiner: Benny T. Lee
Art Unit: 2817

DATE: February 13, 2004

FROM: Barry Shuman

TIME:

TOTAL NO. OF PAGES, INCLUDING COVER: 3

MESSAGE:

RE: U.S. Patent Application Serial No.: 09/709,098; Our Ref. 81707.0164

I hereby certify that the following documents:

- Letter/Abstract of DE4208058

are being facsimile transmitted to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, for filing in the above application.

February 13, 2004
Date of Deposit

Diane Zynn

TELECOPY/FAX NUMBER: 703-872-9319

CLIENT NUMBER: 81707.0164

ATTORNEY BILLING NUMBER: 1966

CONFIRMATION NUMBER: 571-272-1764 (please return fax to Diane Zynn)

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Appl. No. 09/709,098

Attorney Docket No. 81707.0164
Customer No. 26021

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:
Naoyuki SHINO, *et al.*
Serial No: 09/709,098
Filed: November 10, 2000
For: WIRING BOARD

Art Unit: 2817
Examiner: Benny T. Lee

I hereby certify that this correspondence is being transmitted via facsimile to (703) 872-9319:
Commissioner for Patents
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Dear Sir:

Per our telephone conversation of February 13, 2004, I am attaching an Abstract, which serves as a confirmation that DE4208058 is a valid number. Also, it would be greatly appreciated if the Examiner could enter DE4208058 on form PTO-892.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1314.

Respectfully submitted,
HOGAN & HARTSON L.L.P.

Date: February 13, 2004

By: Barry M Shuman
Barry M. Shuman
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esp@cenet document view

Waveguide to microstrip transition for micro and millimetre range - has planar substrate with microstrip line and coupling slot t waveguide formed on separate planar layer.

Also published as:
DE4329570 (A1)

Patent number: DE4208058
Publication date: 1993-09-16
Inventor: MENZEL WOLFGANG PROF DR ING (DE); GRABHERR WILFRIED DIPL ING (DE)
Applicant: DEUTSCHE AEROSPACE (DE)
Classification:
- International: H01P5/107
- European: H01P5/107
Application number: DE19924208058 19920313
Priority number(s): DE19924208058 19920313; DE19934329570 19930902

Abstract of DE4208058
The waveguide to microstrip transition has a planar substrate (1) with a microstrip line (2). Beneath this line there is a coupling slot (3), at a quarter wavelength from the end (20), in the ground surface (7). On the back surface there is a rectangular waveguide (6) with a second planar substrate (5) having a dipole element (4) on its surface.
The boundary contour (30) of the coupling slot is rectangular with sides (140) parallel to the waveguide. High frequency power is coupled between the microstrip, the coupling slot and the dipole in the waveguide.
ADVANTAGE - Simple construction.